

Product Name: Dye Sublimation Ink Sb420 Magenta D SDS No. 037-W420670 First issue: 2016/04/27 Revised: 2024/08/29

Safety Data Sheets

1. Identification

[:] Dye Sublimation Ink Sb420 Magenta D
: SB420-MD-2L / SB420-MD-BJ
:1
: Ink jet printing ink
: Dye Sublimation Ink
: 037-W420670
: Mimaki Engineering Co., Ltd.
[:] 2182-3 Shigeno-otsu, Tomi-shi, Nagano 389-0512 JAPAN
: +81-268-64-2413
ablished in USA
: MIMAKI USA, INC.
: 150 Satellite Boulevard NE , suite A, Suwanee, Georgia 30024,
U.S.A.
: +1-678-730-0170
: +1 866 928 0789 (within United States only, Toll free)
$+1\ 215\ 207\ 0061$

2. Hazards Identification

[HCS Classification]	
Physical Hazards	
Flammable Liquids	: Not classified
Health Hazards	
Skin Corrosion / Irritation	Category 2
Eye Damage / Irritation	Category 2
Sensitization - Skin	Category 1

The above list does not include category being non-classifiable or not-applicable.

[HCS Label Elements] Symbol





Signal Word Warning Hazard Statements H315 Cause skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation **Precautionary Statements** [Prevention] P261 Avoid breathing gas/mist/vapors. P264 Wash hands thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection. [Response] P302+P352 IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash before reuse. [Storage]

None needed according to classification criteria.

[Disposal]

P501 Dispose of contents/container in accordance with local/regional/national/international regulation (to be specified).

NFPA Rating (scale 0 - 4)

Health = 2 Flammability = 0

- - - -

Instability = 0

Special =

3. Composition / Information on Ingredients

No	Chemical Name	Wt%	CAS No.
1	Water	55-65	7732-18-5
2	Glycerol	5-15	56-81-5
3	1,2-Propylene glycol	5-15	57-55-6
4	Preservative	< 0.2	Trade Secret
5	Glycerols	1-10	Trade Secret
6	Glycols	1-10	Trade Secret
7	Dye	1-10	Trade Secret



|--|

The chemical identity and/or percentage of composition is being withheld as a trade secret.

4. First Aid Measures

Inhalation	[:] Remove person to fresh air and keep comfortable for breathing.	
	Call a POISON CENTER or doctor/physician.	
Eye Contact	Rinse cautiously with water for several minutes. Remove contact	
	lenses, if present and easy to do. Continue rinsing. If eye irritation	
	persists, get medical advice/attention.	
Skin Contact	: Gently wash with plenty of soap and water. Take off contaminated	
	clothing and wash before re-use. If skin irritation or rash occurs: Get	
	medical advice/attention. Contaminated clothing should be removed	
	and laundered before reuse.	
Ingestion	: If swallowed, get medical attention.	
Most Important Symptoms/Effects		
Acute	: skin irritation, eye irritation, allergic skin reaction.	
Delayed	: No information on significant adverse effects.	
Indication of Immediate	: Treat symptomatically and supportively.	
Medical Attention and		
Special Treatment		
Needed, If Needed		

5. Fire Fighting Measures

Extinguishing Media	: carbon dioxide, regular dry chemical, water spray, alcohol resistant foam.
Unavitable Extinguishing	
Unsuitable Extinguishing	: Do not scatter spilled material with high-pressure water streams.
Media	
Special Hazards Arising	: Negligible fire hazard. Irritating and/or toxic fumes and gases may
from the Chemical	be emitted upon the product's decomposition.
Hazardous Combustion	: oxides of carbon, acrolein.
Products	
Fire Fighting Measures	: Move container from fire area if it can be done without risk. Do not
	scatter spilled material with high-pressure water streams. Cool
	containers with water spray until well after the fire is out. Stay away

MINCIKI Safety Data Sheets

	from the ends of tanks. Avoid inhalation of material or combustion
	by-products.
Special Protective	: Wear full protective fire fighting gear including self contained
Equipment and	breathing apparatus (SCBA) for protection against possible exposure.
Precautions for	
Firefighters	
Equipment and Precautions for	

6. Accidental Release Measures

Personal Precautions,	: Wear personal protective clothing and equipment, see Section 8.
Protective Equipment	
and Emergency	
Procedures	
Methods and Materials	Avoid heat, flames, sparks and other sources of ignition. Stop leak if
for Containment and	possible without personal risk. Reduce vapors with water spray. Small
Cleaning Up	spills: Absorb with sand or other non-combustible material. Collect
	spilled material in appropriate container for disposal. Large spills:
	Dike for later disposal. Keep unnecessary people away, isolate hazard
	area and deny entry. Stay upwind and keep out of low areas.
Environmental	Avoid release to the environment.
Precautions	

7. Handling and Storage

Precautions for Safe	Avoid breathing vapor or mist. Avoid contact with eyes, skin and
Handling	clothing. Do not eat, drink, or smoke when using this product. Wear
	suitable protective gloves and eye/face protection. Wash thoroughly
	after handling. Contaminated work clothing must not be allowed out of
	the workplace.
Conditions for Safe	: None needed according to classification criteria.
Storage, including any	Store and handle in accordance with all current regulations and
Incompatibilities	standards. Store in a well-ventilated area. Keep container tightly
	closed. Keep cool. Keep separated from incompatible substances.
Incompatible Materials	: acids, bases, oxidizing materials, metal oxides, peroxides, reducing
	agents, combustible materials, halocarbons, metals, metal salts.



8. Exposure Controls / Personal Protection

Component Exposure Limits		
Glycerol	OSHA	15 mg/m3 TWA mist, total particulate; 5 mg/m3 TWA mist,
56-81-5	OBIA	respirable fraction
	Mexico	10 mg/m3 TWA LMPE-PPT mist

EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures

There are no biological limit values for any of this product's components.

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

Engineering Controls

: Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Respiratory Protection : Consult with a health and safety professional for specific respirators appropriate for your use.



Glove

: Wear appropriate chemical resistant gloves.

Recommendations



Eye /Face Protection



Skin Protection



: Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

: Wear appropriate chemical resistant apron.



9. Physical and Chemical Properties

· Color: redOdor: unique odorpH: 7-9Boiling Point / Boiling Range: Not availableMelting Point / Melting Range: Not availableDecomposition Temperature: Not availableFlash Point: Not flammableAuto ignition temperature: Not availableFlammability (Solid, Gas): Not availableCxidizing Properties: Not availableOxidizing Properties: Not availableUpper / Lower Flammability or: Not availableFalative Density: Not availableSolubility: Not availableWater Solubility: Not availableViscosity: SolubleVapor Density: Not availableSolubility: Not availableSolubility: SolublePartition Coefficient (n-octanol / Water): Not availableVapor Density: Ate mPas (25 °C)Vapor Density: Not availableEvaporation Rate: Not available	Appearance	- Physical State	: liquid
pH: 7-9Boiling Point / Boiling Range: Not availableMelting Point / Melting Range: Not availableDecomposition Temperature: Not availableFlash Point: Not flammableAuto ignition temperature: Not availableFlammability (Solid, Gas): Not availableExplosive Properties: Not availableOxidizing Properties: Not availableUpper / Lower Flammability or: Not availableExplosive Limits:Vapor Pressure: Not availableRelative Density: 1-1.2 g/cm³Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableViscosity: 4-6 mPas (25 °C)Vapor Density: Not available		- Color	: red
PNot availableBoiling Point / Boiling Range: Not availableMelting Point / Melting Range: Not availableDecomposition Temperature: Not availableFlash Point: Not flammableAuto ignition temperature: Not availableFlammability (Solid, Gas): Not availableExplosive Properties: Not availableOxidizing Properties: Not availableUpper / Lower Flammability or: Not availableExplosive Limits:Vapor Pressure: Not availableRelative Density: 1–1.2 g/cm³Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableVapor Density: 4-6 mPas (25 °C)Vapor Density: 4-6 mPas (25 °C)	Odor		: unique odor
Melting Point / Melting Range: Not availableDecomposition Temperature: Not availableFlash Point: Not flammableAuto ignition temperature: Not availableFlammability (Solid, Gas): Not availableExplosive Properties: Not availableOxidizing Properties: Not availableUpper / Lower Flammability or: Not availableExplosive Limits: Not availableVapor Pressure: Not availableRelative Density: 1–1.2 g/cm³Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableVapor Density: 4-6 mPas (25 °C)Vapor Density: 4-6 mPas (25 °C)	pН		: 7-9
Decomposition Temperature: Not availableFlash Point: Not flammableAuto ignition temperature: Not availableFlammability (Solid, Gas): Not availableExplosive Properties: Not availableOxidizing Properties: Not availableUpper / Lower Flammability or: Not availableExplosive Limits: Not availableVapor Pressure: Not availableRelative Density: 1–1.2 g/cm³Solubility: Not availableWater Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableVapor Density: 4-6 mPas (25 °C)Vapor Density: Not available	Boiling Point	/ Boiling Range	: Not available
Flash Point: Not flammableAuto ignition temperature: Not availableFlammability (Solid, Gas): Not availableExplosive Properties: Not availableOxidizing Properties: Not availableUpper / Lower Flammability or: Not availableExplosive Limits:Vapor Pressure: Not availableRelative Density: 1–1.2 g/cm³Solubility: SolubleWater Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableViscosity: 4-6 mPas (25 °C)Vapor Density: Not available	Melting Point	: Not available	
Auto ignition temperature: Not availableFlammability (Solid, Gas): Not availableExplosive Properties: Not availableOxidizing Properties: Not availableUpper / Lower Flammability or: Not availableExplosive Limits:Vapor Pressure: Not availableRelative Density: 1–1.2 g/cm³Solubility: Not availableWater Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableViscosity: 4-6 mPas (25 °C)Vapor Density: Not available	Decomposition	n Temperature	: Not available
Flammability (Solid, Gas): Not availableExplosive Properties: Not availableOxidizing Properties: Not availableUpper / Lower Flammability or: Not availableExplosive Limits: Not availableVapor Pressure: Not availableRelative Density: 1–1.2 g/cm³Solubility: Not availableWater Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableViscosity: 4-6 mPas (25 °C)Vapor Density: Not available	Flash Point		: Not flammable
Explosive Properties: Not availableOxidizing Properties: Not availableUpper / Lower Flammability or: Not availableExplosive Limits: Not availableVapor Pressure: Not availableRelative Density: 1–1.2 g/cm³Solubility: Not availableWater Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableViscosity: 4-6 mPas (25 °C)Vapor Density: Not available	Auto ignition	temperature	: Not available
Oxidizing Properties: Not availableUpper / Lower Flammability or: Not availableExplosive Limits: Not availableVapor Pressure: Not availableRelative Density: 1–1.2 g/cm³Solubility: Not availableWater Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableViscosity: 4-6 mPas (25 °C)Vapor Density: Not available	Flammability	: Not available	
Upper / Lower Flammability or: Not availableExplosive Limits:Vapor Pressure: Not availableRelative Density: 1-1.2 g/cm³Solubility: Not availableWater Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableViscosity: 4-6 mPas (25 °C)Vapor Density: Not available	Explosive Pro	perties	: Not available
Explosive LimitsVapor Pressure: Not availableRelative Density: 1–1.2 g/cm³Solubility: Not availableWater Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableViscosity: 4-6 mPas (25 °C)Vapor Density: Not available	Oxidizing Pro	perties	: Not available
Vapor Pressure: Not availableRelative Density: 1–1.2 g/cm³Solubility: Not availableWater Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableViscosity: 4-6 mPas (25 °C)Vapor Density: Not available	Upper / Lower	r Flammability or	: Not available
Relative Density: 1–1.2 g/cm³Solubility: Not availableWater Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableViscosity: 4-6 mPas (25 °C)Vapor Density: Not available	Explosive Lin	nits	
Solubility: Not availableWater Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableViscosity: 4-6 mPas (25 °C)Vapor Density: Not available	Vapor Pressu	: Not available	
Water Solubility: SolublePartition Coefficient (n-octanol / Water): Not availableViscosity: 4-6 mPas (25 °C)Vapor Density: Not available	Relative Dens	$: 1 - 1.2 \text{ g/cm}^3$	
Partition Coefficient (n-octanol / Water): Not availableViscosity: 4-6 mPas (25 °C)Vapor Density: Not available	Solubility	: Not available	
Viscosity: 4-6 mPas (25 °C)Vapor Density: Not available	Water Solubil	: Soluble	
Vapor Density : Not available	Partition Coef	: Not available	
	Viscosity	∶4-6 mPas (25 °C)	
Evaporation Rate : Not available	Vapor Density	7	: Not available
	Evaporation I	Rate	: Not available

10. Stability and Reactivity

Reactivity	: No reactivity hazard is expected.
Chemical Stability	: Stable under normal conditions of use.
Possibility of Hazardous	: Will not polymerize.
Reactions	
Conditions to Avoid	Avoid flames, sparks, and other sources of ignition. Containers may
	rupture or explode if exposed to heat. Avoid contact with incompatible
	materials.
Incompatible Materials	: acids, bases, oxidizing materials, metal oxides, peroxides, reducing

MINCIKI Safety Data Sheets

	agents, combustible materials, halocarbons, metals, metal salts.
Hazardous	: oxides of carbon, acrolein.

Decomposition

11. Toxicological Information

Acute Toxicity

: The components of this material have been reviewed in various sources and the following selected endpoints are published.

	Oral	Dermal	Inhalation
Glycerol	LD50 =12600 mg/kg	LD50 >10 g/kg	LC50 >570 mg/m3 1 h
56-81-5	rat	rabbit	rat
1,2-Propylene glycol	LD50 =20 g/kg	LD50 =20800 mg/kg	
57-55-6	rat	rabbit	-

Information on Likely Routes of Exposure

•	-
Inhalation	irritation, difficulty breathing, nausea, vomiting
Ingestion	\vdots nausea, vomiting, diarrhea, headache, dizziness, drowsiness, stomach
	pain
Skin Contact	: irritation, allergic skin reaction
Eye Contact	irritation
Immediate Effects	skin irritation, eye irritation, allergic skin reaction
Delayed Effects	: No information on significant adverse effects.
Medical Conditions	[:] kidney disorders, skin disorders and allergies
Aggravated by	
Exposure	
Irritation/Corrosivity	skin irritation, eye irritation
Data	
Respiratory	: No information available for the product.
Sensitization	
Dermal Sensitization	: May cause an allergic skin reaction.
Germ Cell	: No information available for the product.
Mutagenicity	
Carcinogenicity	: None of this product's components are listed by ACGIH, IARC, NTP,
	DFG or OSHA
Tumorigenic Data	: No data available
Reproductive Toxicity	: No information available for the product.



Specific Target Organ	: No target organs identified.
Toxicity - Single	
Exposure	
Specific Target Organ	: No target organs identified.
Toxicity - Repeated	
Exposure	
Aspiration Hazard	: Not expected to be an aspiration hazard.

12. Ecological Information

Handling is noted because it might influence the environment when leaking and abandoning it. Especially, note that the product doesn't flow directly to ground, the river, and the drain ditch.

Component Analysis -	Glycerol(56-8	1-5)						
Aquatic Toxicity	Fish:	LC50 96 h Oncorhynchus mykiss 51 - 57 mL/L [static]						
	1,2-Propylene	glycol(57-55-6)						
	Fish:	LC50 96 h Oncorhynchus mykiss 51600 mg/L [static];						
		LC50 96 h Oncorhynchus mykiss 41 - 47 mL/L [static];						
		LC50 96 h Pimephales promelas 51400 mg/L [static];						
		LC50 96 h Pimephales promelas 710 mg/L						
	Algae:	EC50 96 h Pseudokirchneriella subcapitata 19000 mg/L						
		IUCLID						
	Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L [Static] EPA						
Persistence and	: No informati	No information available for the product.						
Degradability								
Bioaccumulation	: No informati	on available for the product.						
Mobility	: No informati	on available for the product.						

13. Disposal Considerations

 Disposal Methods
 : Comply with all USA, national and local regulations.

 Do not dump this product into sewers, on the ground or into any body of water.

MIMCIKI[®] Safety Data Sheets

14. Transport Information

	Check a thing without a leak in a container.
	Perform prevention of collapse of cargo surely.
US DOT Information	: Not regulated as a hazardous material for transport.
TDG Information	: Not regulated as dangerous goods for transport.
IATA Information	: Not regulated as dangerous goods for transport.
ICAO Information	: Not regulated as dangerous goods for transport.
IMDG Information	: Not regulated as dangerous goods for transport.
Marine Pollutants	: Not regulated as dangerous goods for transport.
(IMDG)	
International Bulk	: This material does not contain any chemicals required by the IBC
Chemical Code	Code to be identified as dangerous chemicals in bulk.

15. Regulatory Information

U.S. Federal	: None of this products components are listed under SARA Sections
Regulations	302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65),
	CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process
	safety plan.
Section 311/312	: Acute Health: Yes Chronic Health: No Fire: No Pressure: No
(40 CFR 370)	Reactivity: No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Glycerol	56 - 81 - 5	No	Yes	Yes	Yes	Yes
1,2-Propylene glycol	57-55-6	No	No	Yes	Yes	Yes

California Proposition : Not listed under California Proposition 65

65

 $Component \, Analysis - Inventory \\$

Glycerol (56-81-5)

US	CA	EU	AU	PH	JP -	JP -	KR -	KR -	CN	NZ	MX	TW
					ENCS	ISHL	KECI/KECL	TCCA				
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes



1,2-Propylene glycol (57-55-6)

Safety Data Sheets

US	CA	EU	AU	PH	JP -	JP -	KR -	KR -	CN	NZ	MX	TW
					ENCS	ISHL	KECI/KECL	TCCA				
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes

16. Other Information

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS -Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC -European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory, EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law, JP - Japan; Kow - Octanol/water partition coefficient; KECI - Korea Existing Chemicals Inventory, KECL – Korea Existing Chemicals List, KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA -Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL -Short-term Exposure Limit; TCCA – Korea Toxic Chemicals Control Act, TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL -Upper Explosive Limit; US - United States.

This information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of Mimaki Engineering Corporation.

It relates only to the specific material designated herein, and does not relate to use in combination with any other material or process.



Mimaki Engineering Corporation assumes no legal responsibility for use or reliance upon this information.